

Notice of Allowability

Application No.

09/930,329

Examiner

Samuel W Liu

Applicant(s)

TURPEN, THOMAS H.

Art Unit

1653

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 6-10-04
2. ☒ The allowed claim(s) is/are 26-36.
3. ☒ The drawings filed on 14 August 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
- ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
- ☐ Notice of Informal Patent Application (PTO-152)
- ☒ Interview Summary (PTO-413), Paper No./Mail Date 8-12-04.
- ☒ Examiner's Amendment/Comment
- ☐ Examiner's Statement of Reasons for Allowance
- ☐ Other _____.

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DETAILED ACTION

The terminal disclaimers filed on 10 June 2004 disclaiming the terminal portion of any patent granted on this application, which would extend beyond the expiration date of US Pat. Nos.: 5889191, 6462255, 5965794 and 5811653 have been reviewed and are accepted.

This Office action is in response to applicants' amendments filed 10 June 2004 which amends claim 26. The stated amendment has been entered. Note that claims 1-15 are canceled by the applicant's amendment filed 23 December 2003. Thus, the pending claims 26-36 are therefore examined in this Office action.

It is of note that Examiner has considered the references listed in the IDS filed 8 July 2002, which is, in fact, a copy from the parental application No. 09414916 (see the applicant submitted copy of this IDS filed 26 January 2004).

EXAMINER'S AMENDMENT

An Examiner's Amendment to the record appears below. Should the change and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 C.F.R. § 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than payment of the Issue Fee.

Authorization for this Examiner's Amendment was given in a telephone interview with Paul B. Littlepage on August 12, 2004. Applicant agrees the Examiner proposed amendment to claim 31 (see below).

Amendments to the claim:

The pending claims 7, 13 and 50 have been amended or canceled as follows. Please replace the previous claims with the claim shown below.

Claim 31 (*Currently amended*): change "comprises" to "is selected from the group consisting of".

Amendments to the specification:

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(i) Insert the following paragraph before the "Description" paragraph:

This patent application claims that this application is a divisional application of 09/414916 filed 8 October 1999 (now US Pat. No. 6462255) which is a continuation application of 08/336724 filed 9 November 1994 (now US Pat. No. 5965794) which is a continuation application of 07/997733 filed 30 December 1992, which was abandoned.

(ii) The abstract is amended as follows (in one paragraph):

A novel method of over expressing genes in plants is provided. This method is based on the RNA amplification properties of plus strand RNA viruses of plants. A chimeric multicistronic gene is constructed containing a plant promoter, viral replication origins, a viral movement protein gene, and one or more foreign genes under control of viral subgenomic promoters. Plants containing one or more of these recombinant RNA transcripts are inoculated with helper virus. In the presence of helper virus, the recombinant transcripts are replicated producing high levels of foreign gene RNA.

Conclusion: Claims 26-36 are allowable over the art of record.

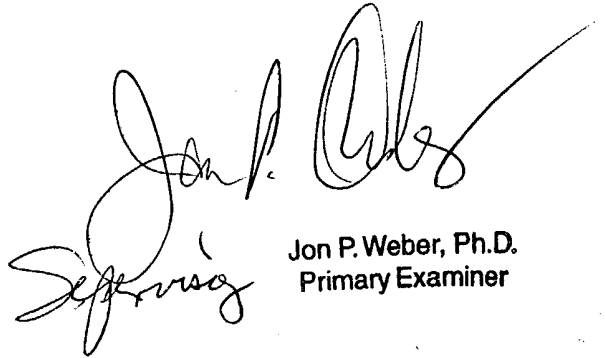
Any comments considered necessary by applicants must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Samuel Wei Liu, Ph.D. whose telephone number is (571) 272-0949. The Examiner can normally be reached daily except alternate Fridays from 8:30 A.M. to 5:30 P.M. If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Jon Weber, can be reached at (571) 272-0925. The official fax number for Technology Center 1600 is (703) 308-4242. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 1600 receptionist whose telephone number is (703) 308-0196.

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Samuel W. Liu, Ph.D.
Art Unit 1653, Examiner
August 12, 2004



Jon P. Weber, Ph.D.
Primary Examiner

Abstract

A novel method of over expressing genes in plants is provided. This method is based on the RNA amplification properties of plus strand RNA viruses of plants. A chimeric multicistronic gene is constructed containing a plant promoter, viral replication origins, a viral movement protein gene, and one or more foreign genes under control of viral subgenomic promoters. Plants containing one or more of these recombinant RNA transcripts are inoculated with helper virus. In the presence of helper virus, the recombinant transcripts are replicated producing high levels of foreign gene RNA.